



SAFE DRINKING WATER ACT Underground Injection Control

Daryl Shoemake, P.G.
US Environmental Protection Agency – Region 4
Water Programs Enforcement Branch
Central Enforcement Section
Ph: (404) 562-9792 Fax: (404) 562-9729

E-mail: shoemake.daryl@epa.gov

Web:

http://www.epa.gov/region4/water/wpeb





SAFE DRINKING WATER ACT

- Developed in 1974 –Protect Public Health
- SDWA Part C Protection of USDWs
- Section 1421 Reg for State UIC Prog.
 - UIC Regulations 40 CFR Parts 144-148
- Section 1422 State Primary Enf. Resp.
- Section 1423 EPA Enf./Oversight
- SDWA Part D Section 1431 Emergency Powers



INSPECTION AUTHORITY

- **300j-4(b)(1) of the SDWA**
 - Enter facility, property, or establishment
 - Conduct inspection, tests, audits
 - **Examine Records**
- Primacy States
 - Notification in Advance
 - Accompany EPA
- Failure to allow authorize entry Subject to penalty up to \$25,000



INSPECTION TYPE

- Routine Inspection
 - Monitor Operation
 - Records Review
- Targeted Inspection
 - Class of Injection Well
 - Sector Based
 - Investigations of suspected non-compliance
 - **■** Referrals
- Multimedia (can be part of targeting strategy)



INSPECTION CONTENT

- In-Briefing
- Facility Overview
 - Operations and Layout
 - Map review
- Site Inspection/Verification
- Review Permitted Facilities
- Out-Briefing
- Inspection Report



INSPECTION FOCUS

- Permitted Wells
 - Inspection/Operation
 - Records review
- Facility Activity
- Identification of Other Injection Wells
- Field Inspection/Verification



CLASSES OF INJECTION WELLS

- Class I Hazardous/non-hazardous fluids & Municipal wastewater below the lowermost USDW
- Class II Fluids associated with production of Oil and Natural Gas
- Class III Fluids to extract minerals (Solution mining)
- Class IV Hazardous or Radioactive wastes into or above a USDW (Banned!)
- Class V All Other (Non-hazardous fluids into or above a USDW.



CLASS V INJECTION WELLS

- Class V Rule, Phase I
 - Finalized in 1999
 - Two Subtypes of Wells
- Large Capacity Cesspools
 - Serves 20 persons or more
 - New are Banned (2000)
 - Existing must close (2005)
 - Notification 30 Days for Closure



CLASS V INJECTION WELLS

- Motor Vehicle Waste Disposal Wells
 - New are Banned (2000)
 - Existing must close by 2008 or apply for permit
 - Notification 30 Days for Closure
- States Determine Watershed Protection Areas by January 1, 2004



CLASS V INJECTION WELLS

- Class V Rule, Phase II
 - Determine Remaining Class V Well Types
 - Determine Need for Additional Regulations
 - Proposed April 2001
 - Final Determination Effective June 7, 2002
- Protective Requirements of Program
 - Develop Comprehensive Inventory
 - Protect USDW from contamination
 - Require Permits, Monitoring, or Closure



OTHER CLASS V WELLS

- Sanitary
 - Large Capacity Septic Tanks (>20 persons)
 - Single Family Excluded
- Industrial Wells
 - Incidental/Process Waste
 - Car Wash Wastewater
 - Laundromats
 - Food Processing
- Aquifer Remediation Wells
- Storm Water Wells



Obvious Storm Water Well









CLASS V WELL MANAGEMENT

- Class V Wells Authorized by Rule
 - Not Endangering a USDW
 - Submit Basic Inventory Information
- If Potential for USDW Contamination?
 - Require UIC Permit
 - Preventive Action (Closure)
 - Remediation
 - Enforcement Action



TYPICAL VIOLATIONS

- Permitting
 - Failure to meet Permit conditions
 - Monitoring
 - Mechanical Integrity
- Illegal Injection Activity
- Injection Endangerment of a USDW/PWS
- Failure to Submit Information

EPA INVENTORY PROGRAM "Not Enforcement"

- Meet with Base Environmental Staff
- Explain Types of UIC Wells
- Conduct Inventory w/Base Staff
- Educate/Assist Staff w/questions



INVENTORY REQUIREMENTS 40 CFR Section 144.26

- Name
- Location Information
- Ownership
- Nature of Fluid
- Type of Injection Well
- Status of Well
- See Handout...



- Located in TN or KY
 - Contact EPA
- Other Region 4 States
 - Contact State UIC Program



EPA ENFORCEMENT PROCESS

- Inspection
- NOV/Show Cause
- Informal Conference
 - Settlement CAFO or Withdrawn
 - No Settlement
 - Administrative Complaint
- Administrative Complaint (Injunctive Relief and/or \$\$)
- Hearing and Negotiations
- CAFO or Litigation (Possible Civil Referral)



GENERAL RULES

- **EPA** will normally not make specific statements of any Violations of the UIC Program during inspections.
- Submittal of UIC Class V inventory will be requested
- Inventory assistance is available